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Vives, F., Shmeleva A.A. 2010. ***Crustacea, Copépodos marinos II. Non Calanoida***. In: *Fauna Ibérica*, vol. 33. Ramos *et al.* (eds.), Museo Nacional de Ciencias Naturales, CSIC, Madrid, 486 pp. ISBN: 978-84-00-07010-6 (for Fauna Ibérica); ISBN: 978-84-0009254-2 (for volume 33). In Spanish.

In the review of the 29th volume of *Fauna Ibérica*, an updated revision of the marine calanoid copepods (Vives and Shmeleva 2006), I mentioned that the same authors were near completing a study of the remaining groups of planktonic copepods (Alcaraz 2007). Now the promised review of the no less than nine orders that comprise the non-calanoids has become a reality. Although copepods are a relatively small group of crustaceans (around 12000 species), the planktonic copepods are the most abundant animals on our planet, even more abundant than insects, as conservative estimates suggest that they can be quantified by a figure with 21 zeros. Moreover, they play a crucial ecological role in the oceans as they are the most important link in the complex web of matter and energy transfer from primary producers to upper consumer levels.

The group studied here, the non-calanoid copepods, integrates an assemblage of families, genera and species that display an extraordinary variety of morphologies and occupy all possible habitats in aquatic ecosystems. Unlike *Calanoida*, which have quite uniform features and living habits, this group includes from free-living to commensal and parasitic forms, and from planktonic to psammic and anchilaine forms. The taxonomic difficulties of the group, which are increased by a fragmented bibliography (the usual tools for an automatic reference search are almost useless in the taxonomy), are such that, in spite of its enormous interest from an evolutive and ecological point of view, most copepodologists tiptoe tentatively around studying it. As the authors state, there is still an urgent need to revise some aspects of the systematics of copepods, singularly for the non-Calanoida. New exploration efforts and better sampling of poorly known habitats will provide, apart from new species, fresh data to clear up some of the taxonomic doubts.

The book starts with a brief and useful *Introduction* in which the general characteristics of the non-*Calanoida* are described and compared with those of the *Calanoida*. It should be mentioned that a more extensive, general introduction to copepods with details about their external and internal morphology, physiology, phyletic position, swimming and feeding behaviour, reproduction and living habits has already been provided in the previous volume of the monograph (Vives and Shmeleva 2006). As in the volume devoted to the *Calanoida*, helpful taxonomic keys allow the reader to identify orders, the families included in each order, the genera included in the families, and the species included in the genera. For each taxonomic category the authors not only give the valid name with the corresponding authority and year of its description, but also a useful list of synonyms, with remarks on different opinions regarding their systematic and phyletic position. For each species inhabiting the area included in the study, there are precise descriptions of both sexes (when the male is known), complemented with clear illustrations to facilitate identifying them. All in all, the authors have recorded more than 200 species illustrated with 209 figures, resulting in a total of more than 1800 drawings of specific morphological details, some of which are original to the authors. However, like in the study on the *Calanoida* and in other issues of *Fauna Ibérica*, there is a minor point that I find a little annoying: the figure captions are arranged in a disconcerting three column format. Exhaustive biogeographic, bionomic, ecological and behavioural data complete the information, supported by more than 500 references. The volume ends with two appendices: *Appendix 1* provides a helpful list of synonyms and their combinations; and *Appendix 2* provides the general glossary of terms, valid for the two volumes of the monograph.

As could not be otherwise, the high expectations awoken by the announcement of its publication have been fulfilled. The authors' work is an example of patience and scholarship, a tribute to the painstaking and necessarily unhurried ways of classical taxonomists, which is especially important in times characterized by frantic pressure on scientific publication.

Volumes 29 and 33 of *Fauna Ibérica*, devoted to the planktonic marine copepods inhabiting the Mediterranean and the near Atlantic and containing comprehensive descriptions of more than 700 species, are without doubt a most complete and valuable contribution to the taxonomy and systematics of marine planktonic copepods, a monograph *de rigueur* for any scholar interested in marine Iberian plankton.

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